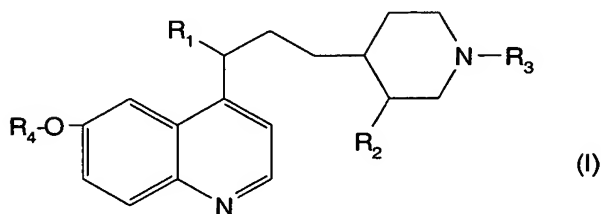


CLAIMS

1. A quinolylpropylpiperidine derivative of general formula:



in which:

R₁ is an amino, alkylamino, dialkylamino, hydroxyamino, alkyloxyamino, or alkyl(alkyloxy)amino radical,

R₂ is a carboxyl, carboxymethyl or hydroxymethyl radical,

R₃ is an alkyl radical having 1 to 6 carbon atoms substituted by a substituent selected from the group consisting of a.) a phenylthio radical which, itself, has up to 4 substituents selected from the group consisting of halogen, hydroxyl, alkyl, alkyloxy, trifluoromethyl, trifluoromethoxy, carboxyl, alkyloxycarbonyl, cyano and amino, b.) a cycloalkylthio radical, the cyclic part of which comprises 3 to 7 members, and c.) a 5- to 6-membered heteroarylthio radical comprising 1 to 4 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur and optionally substituted by one or more substituents selected from the group consisting of halogen, hydroxyl, alkyl, alkyloxy, trifluoromethyl, trifluoromethoxy, oxo, carboxyl, alkyloxycarbonyl, cyano and amino; or, alternatively, R₃ is a propargyl radical that is (a) substituted by a phenyl radical which is optionally substituted by 1 to 4 substituents selected from the group consisting of halogen, hydroxyl, alkyl, alkyloxy, trifluoromethyl, trifluoromethoxy, carboxyl, alkyloxycarbonyl, cyano and amino or (b) substituted by a cycloalkyl radical comprising 3 to 7 members or (c) substituted by a 5- to 6-membered heteroaryl radical comprising 1 to 4 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur, said heteroaryl radical being optionally substituted by one or more substituents selected from the group consisting of halogen, hydroxyl, alkyl, alkyloxy, trifluoromethyl, trifluoromethoxy, oxo, carboxyl, alkyloxycarbonyl, cyano and amino, and

R₄ is selected from the group consisting of an alkyl radical comprising 1 to 6 carbon atoms, an alkenyl-CH₂- radical, the alkenyl portion of which comprises 2 to 6 carbon

atoms, an alkynyl-CH₂- radical, the alkynyl portion of which comprise 2 to 6 carbon atoms, a cycloalkyl radical, the cyclic portion of which comprises 3 to 8 members and a (cycloalkyl)alkyl radical, the cyclic portion of which comprises 3 to 8 members,

5 said alkyl radicals being straight- or branched-chain radicals that, unless otherwise specified, comprise 1 to 4 carbon atoms,

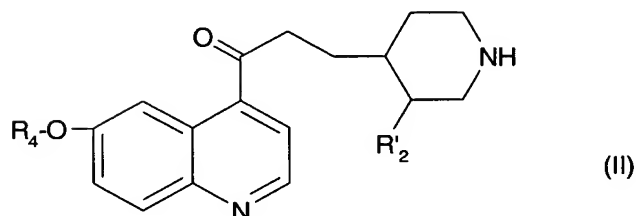
in its cis and trans forms and/or in its diastereoisomeric forms or their mixtures, and the pharmaceutically acceptable salts thereof.

10

2. A process for the preparation of a quinolylpropylpiperidine derivative as claimed in claim 1, which process comprises the following steps:

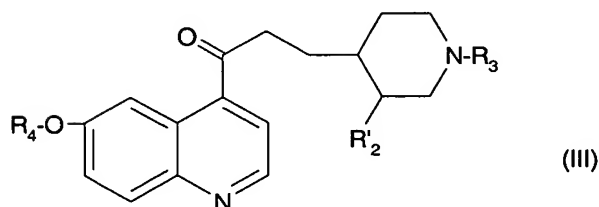
1) condensation of an R₃ chain as defined in claim 1 onto a quinolylpropylpiperidine derivative of general formula:

15



in which R₄ is as defined in claim 1 and R'₂ is a protected carboxyl radical or a protected carboxymethyl radical, whereby there is obtained a quinolylpropylpiperidine derivative of general formula:

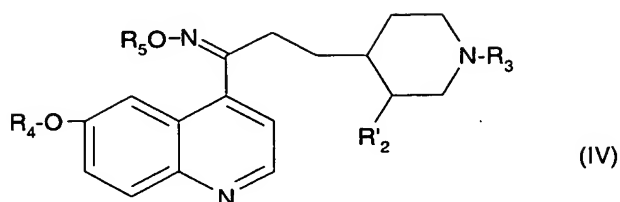
20



in which R'₂ and R₄ are as defined above and R₃ is as defined in claim 1;

25

2) conversion of the oxo radical to a hydroxyimino or alkyloxyimino radical, in order to obtain a quinolylpropylpiperidine derivative of general formula:



in which R'₂, R₃ and R₄ are as defined above and R₅ is a hydrogen atom or an alkyl radical,

5

3) then, if appropriate, the reduction of the product of step 2) to an amine, and, optionally, the conversion to a monoalkylated or dialkylated amine, or the reduction to a hydroxylamine or to an alkyloxyamine,

10

4) then, if appropriate, the conversion of the derivative obtained from step 3) in which R₁ is alkyloxyamino to alkyl(alkyloxy)amino by alkylation,

5) then, the conversion of the R'₂ radical to a carboxyl or carboxymethyl radical,

15

6) then, if appropriate, the reduction of the carboxyl radical thus obtained or of the protected carboxyl radical which R'₂ may be to a hydroxymethyl radical and,

7) optionally, the conversion of the latter to a carboxymethyl radical according to the usual methods, and

20

8) optionally, the conversion of the product obtained to a pharmaceutically acceptable salt and/or, if appropriate, separation of its isomeric forms.

3. The process as claimed in claim 2, wherein the condensation of the R₃ chain onto the piperidine is carried out by the action of a derivative of general formula:

25



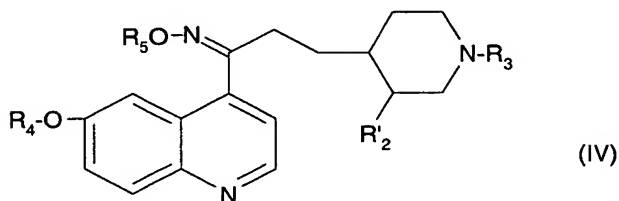
in which R₃ is as defined in claim 1 and X is a halogen atom, a methylsulfonyloxy radical, a trifluoromethylsulfonyloxy radical or a p-toluenesulfonyloxy radical.

30

4. The process as claimed in claim 3, wherein, when R₃ represents propargyl substituted by phenyl, cycloalkyl or heteroaryl as defined in claim 1, and the reaction is carried out by condensation of a propargyl halide and then substitution of the propargyl chain with a

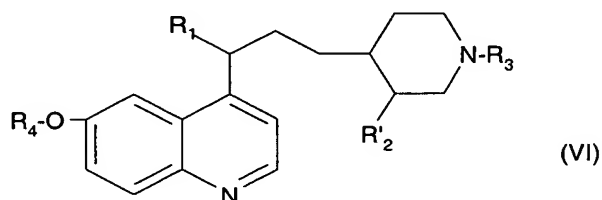
phenyl, cycloalkyl or heteroaryl radical.

5. A quinolylpropylpiperidine derivative, which corresponds to the general formula:



in which R'₂, R₃, R₄ and R₅ are as defined in claim 2.

6. A quinolylpropylpiperidine derivative, which corresponds to the general formula:



in which R₁ is as defined in claim 1 and R'₂, R₃ and R₄ are as defined in claim 2.

7. A pharmaceutical composition, which comprises at least one compound as claimed in claim 1, in the pure state or in combination with one or more compatible and pharmaceutically acceptable diluents or adjuvants.
8. A method of treating microbial infections, which comprises administering to a patient in need thereof an antimicrobially effective amount of a pharmaceutical composition as claimed in claim 7.